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ARMY 9-MM HANDGUN CONTRACT WITH BERETTA CORPORATION SHOULD BE TERMINATED

THIRTY-SIXTH REPORT

BY THE

COMMITTEE ON GOVERNMENT OPERATIONS

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LETTER OF TRANSMITTAL

HOUSE OF REPRESENTATIVES,
Washington, DC, June 24, 1986.

Hon. THOMAS P. O'NEILL, Jr.,
Speaker of the House of Representatives,
Washington, DC.

DEAR MR. SPEAKER: By direction of the Committee on Government Operations, I submit herewith the committee's thirty-sixth report to the 99th Congress. The committee's report is based on a study made by its Legislation and National Security Subcommittee.

JACK BROOKS, *Chairman.*

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99TH CONGRESS
2d Session

HOUSE OF REPRESENTATIVES

REPORT
99-652

ARMY 9-mm HANDGUN CONTRACT WITH BERETTA CORPORATION SHOULD BE TERMINATED

JUNE 24, 1986.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. BROOKS, from the Committee on Government Operations, submitted the following

THIRTY-SIXTH REPORT

BASED ON A STUDY BY THE LEGISLATION AND NATIONAL SECURITY SUBCOMMITTEE

On June 24, 1986, the Committee on Government Operations approved and adopted a report entitled "Army 9-mm Handgun Contract With Beretta Corporation Should Be Terminated." The chairman was directed to transmit a copy to the Speaker of the House.

I. SUMMARY

On April 10, 1985, the Department of the Army awarded a five-year contract for 315,930 9-millimeter (mm) pistols to Beretta Corporation, an Italian firm. The contract, valued at approximately $75 million, culminated a lengthy seven-year procurement process requiring three rounds of extensive testing, including two false starts. The process was initiated to replace the venerable Colt .45, first purchased by the military in 1911, and other various models of .38 caliber revolvers with a new standard "off-the-shelf" handgun for all the military services.

Although eight of the world's leading small arms manufacturers entered the third and final round of competition for the contract, the Army ended up evaluating price proposals from only two competitors. All others were either eliminated for technical reasons or withdrew voluntarily. The two finalists included the Maremont Corporation of Maine, bidding a weapon made in Germany by SIG-Sauer, a Swiss firm, and Beretta, the eventual winner. Several of the losing vendors challenged the award to Beretta on the basis they were unfairly eliminated from the competition. Consequently,

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the handling of this procurement for a commercially available handgun, probably the least complex and one of the least expensive weapons in the American arsenal, has embroiled the Army in a series of bid protests and court cases, and has generated mounting criticism from the Congress.

Acting on allegations that the Army had improperly awarded the contract to Beretta, and had unfairly disqualified domestic as well as other firearms manufacturers in the process, this Committee undertook an investigation into the procurement. During the course of that investigation, evidence and testimony has indicated that:

(1) The procurement was hindered by the conflicting goals and priorities of the military services, especially of the Air Force and Army;

(2) The Army's evaluation of candidate weapons against rigid military specifications was inappropriate for what was essentially an "off-the-shelf" procurement;

(3) The award was improper in that Smith & Wesson, whose weapon was technically acceptable, was unfairly eliminated from the competition prior to evaluation of price proposals; and

(4) The Army cannot establish that it obtained the lowest overall price in meeting its needs, since technically accepted candidates were eliminated from the competition.

The events surrounding the 9-mm program provide an excellent case study on how not to conduct an effective procurement, particularly for an "off-the-shelf" commercially available item. In attempting to buy this relatively simple weapon, the Army managed to conduct a procurement where most of the world's leading arms manufacturers were eliminated or withdrew, narrowing the price competition down to two firms bidding foreign-made handguns. Clearly, Smith & Wesson, and perhaps other companies, were denied a chance to compete fairly for this contract, and should be provided that opportunity. Therefore, this Committee believes that the only solution is for the Secretary of the Army to order that the Beretta contract be terminated and that the remaining number of handguns needed by the military services beyond those currently ordered be recompeted among technically acceptable candidates.

II. COMMITTEE INVESTIGATION AND HEARING

In September 1985, the Committee requested that GAO undertake an investigation into the manner in which the Army, acting as executive agent for all the military services, conducted its 9-mm handgun procurement.[1] The investigation centered on allegations that the Army had improperly awarded the contract for the new standard military sidearm to Beretta Corporation, an Italian firm, and had unfairly excluded qualified domestic firearms manufacturers in the process.

Hearings were held by the Legislation and National Security Subcommittee on June 5, 1986, to address these issues. Testimony

[1] GAO issued its report entitled "Pistol Procurement: Allegations on Army's Selection of Beretta 9-mm As DOD Standard Sidearm," GAO/NSIAD-86-122, on June 16, 1986. The report was prepared by John A. Rinko and Walter S. Ochinko of GAO's National Security and International Affairs Division.

was received from representatives of the U.S. General Accounting Office (GAO), the Department of the Army, the U.S. firearms manufacturer—Smith & Wesson, and an internationally recognized expert in the field of military small arms developments—Dr. Edward C. Ezell. The Honorable Edward P. Boland, Congressman from Massachusetts, also appeared.

III. DISCUSSION

A. Background

The move toward a standard military handgun

The Department of Defense (DOD) inventory of handguns consists primarily of .45 caliber pistols and .38 caliber revolvers. The Colt .45, first purchased by the military in 1911, has been the services' standard issue sidearm since that time—about 75 years. The Army, Navy, Marines and Coast Guard issue this pistol as their primary personal defense weapon. The Air Force, on the other hand, primarily uses the .38 caliber revolver, although the weapon has not been established as a service standard. It is the only service that does not have substantial numbers of .45 pistols. As shown below, there are approximately 590,000 of these weapons in DOD's inventory, 73 percent of which are in serviceable condition. While there are no available statistics on the dollar value of this inventory of weapons and associated ammunition, in all likelihood it would be substantial.[2]

COMBINED SERVICE ASSETS OF .45 AND .38 CALIBER SIDEARMS [1]

Sidearm	Serviceable		Unserviceable	
	Issued	In storage	In storage	Totals
.45 pistol	237,790	63,159	116,499	417,448
.38 2" barrel	10,925	13,216	9,209	33,350
.38 3" barrel	1,036		257	1,293
.38 4" barrel	95,307	8,247	34,532	138,086
Total	345,058	84,622	160,497	590,177

[1] Source: GAO report PLRD–82–42, dated March 8, 1982, Appendix I, pp. 1.

In 1978, the House Appropriations Committee studied the proliferation of handguns and ammunition throughout the military, finding there were more than 25 different makes and models of handguns and over 100 types of sidearm ammunition in the service inventories. Concerned about the logistics and maintenance costs associated with such a varied inventory of handguns and ammunition, the Appropriations Committee urged DOD to expeditiously make a decision on a standard handgun, and prepare a plan to achieve that standard.

At the time Congress made this recommendation, DOD had already directed a joint service small arms task force to review prior studies of the standardization issues, examine the current situa-

[2] During the Subcommittee's hearings on June 5, 1986, Under Secretary of the Army Ambrose was asked to provide this information for the record. At the time of this report, it had not yet been provided.

tion, consider alternatives, and recommend a course of action. The group was to:

> * * * determine the minimum number of types of handguns to meet essential service requirements and to determine if the United States should adopt the NATO standard 9-mm handgun cartridge.

The study concluded that essential military requirements could best be served by a single family of small arms weapons using 9-mm ammunition. Before reaching this decision, the task force addressed the following alternatives:

Continue using the present inventory of revolvers and pistols.

Standardize revolvers which use .38 caliber ammunition.

Standardize the .45 caliber standard pistol.

Buy a new, single family of sidearms which uses NATO standard 9-mm ammunition.

In 1980, recognizing that the replacement would cost at least $133 million more over 20 years than maintaining the current inventory, the joint service task force recommended adoption of alternative four because of the additional features it believed the 9-mm pistol offered. They made this decision even though faced with having to retire some 417,000 .45 caliber pistols and about 173,000 .38 caliber revolvers, most of which were in serviceable condition.

Failed attempts to accomplish standardization

After reaching its 9-mm decision in 1980, the task force further recommended that DOD sole-source Beretta handguns, relying on the results of Air Force testing which concluded that Beretta was by far the superior weapon. This testing, performed on an informal basis at Eglin Air Force Base, was started in 1978, again at about the same time the House Appropriations Committee recommended standardization of DOD's handguns. DOD officials, however, opposed awarding a sole-source contract to Beretta on grounds that the Air Force had not conducted its tests scientifically.

Since 1980, the Army, acting as executive agent for all the services, has conducted two additional extensive rounds of testing on 9-mm pistols. Unlike the 1978 Air Force tests, the two Army tests evaluated the performance of candidate pistols against a very detailed set of written specifications. While the expressed goal of the standardization program was to select a commercially available handgun, the specifications were designed more for the procurement of a militarily developed weapon and contained over 50 mandatory minimum performance requirements.

Four commercial gun makers [3] entered the first Army competition which began in late 1981. Although the established goal of the program was to select an "off-the-shelf" commercial handgun, the detailed specifications proved to be too stringent to do so. As a result, in February 1982, the procurement was cancelled because

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[3] The four commercial manufacturers included: Beretta Corporation of Italy; Heckler & Koch of West Germany; Maremont Corporation of Maine, bidding a weapon made in Germany by SIG-Sauer, a Swiss firm; and Smith & Wesson, the only U.S. firm.

no candidates' pistol met all the mandatory requirements.[4] Smith & Wesson (S&W), however, did come out ahead of Beretta and the other two competitors in this competition.

Because of its failure to select a winning pistol during the 1981 test, the Army set out to revise the specifications in order that a commercially available handgun could be selected. Although rewritten, the 1982 version of the requirements, with only a few exceptions, were almost identical to the original version. While the new version relaxed some criteria to "equal to or better" than the Colt .45, it still set forth over 50 mandatory requirements, many of which were inappropriate for an "off-the-shelf" procurement.

The final round of Army testing and evaluation

In November 1983, the Army initiated its second round of testing by asking prospective commercial firearms manufacturers, in a formal "Request For Test Samples (RFTS)," to submit 30 of their 9-mm pistols for testing. The RFTS stated that there would be no cash remuneration for the test pistols, and that all items would become the property of the government and not returned. The Army did promise, however, to provide each competitor with the test results for its weapon after the evaluation was complete and final reports prepared.

Eight companies submitted sample weapons in January 1984 and testing began in February of that year. During the early stages of the testing, two firms withdrew voluntarily from the competition, and one was eliminated on technical grounds. Three of the remaining five were found technically unacceptable by the Army just before price proposals were to be submitted.[5] The following table lists each manufacturer participating in the 1984 competition, the model of its handgun, and how it fared in the competition. In addition, the following pages contain pictures and technical characteristics of each weapon.

MANUFACTURERS SUBMITTING PISTOLS FOR 1984 COMPETITION

Manufacturer	Model	Comments
Steyr-Daimler-Puch, AG, Austria	GB	Terminated by Army on May 4, 1984, for poor reliability.
Fabrique Nationale Herstal, SA, Belgium	BDA	Voluntarily withdrew on May 31, 1984.
Colt Industries, Firearms Division, U.S.A.	SSP	Voluntarily withdrew on July 18, 1984.
Carl Walther, Waffenfabrik, West Germany	P88	Terminated by Army on September 18, 1984, for failing drop test, dispersion, corrosion resistance, and adverse conditions requirements.
Heckler & Koch (H&K), West Germany	P7M13	Terminated by Army on September 18, 1984, for failing reliability and corrosion resistance requirements.

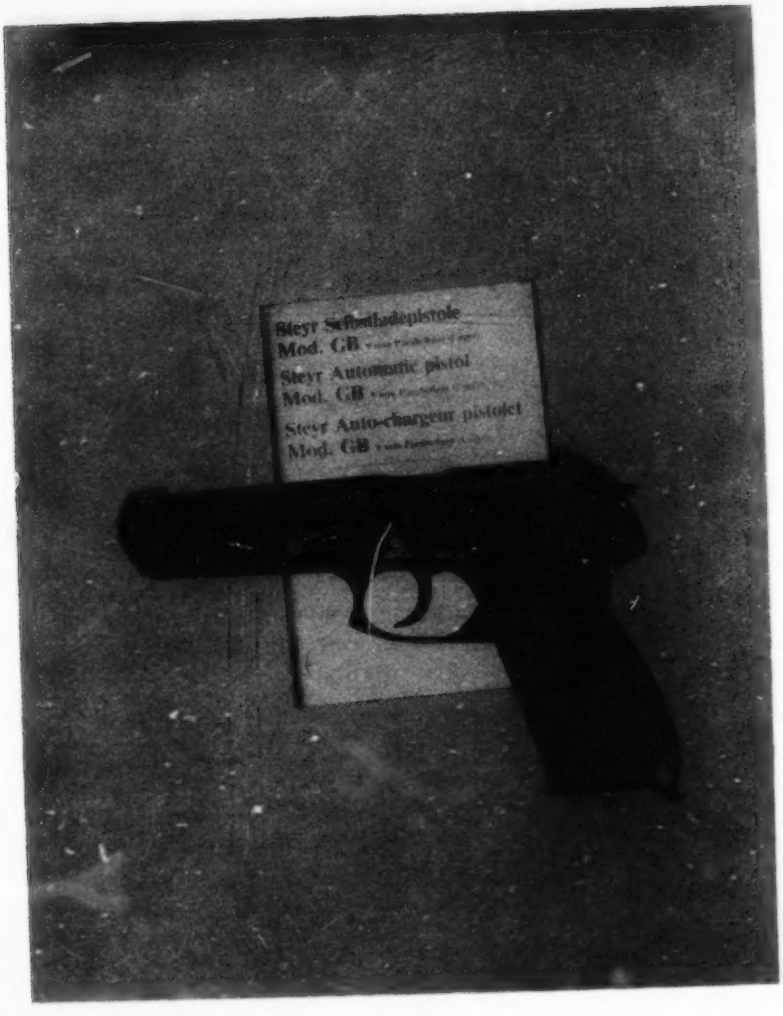
[4] On Mar. 8, 1982, the General Accounting Office issued a report entitled "Proposed Program For New 9-mm Handguns Should Be Reexamined," PLRD-82-42. GAO reported that (1) DOD's proposed 9-mm procurement would cost about $133 million more than it would cost to continue to use the present mix of sidearms, and (2) since the purpose of adopting a new sidearm was to save money, the program should be reexamined.

[5] Two firms whose pistols were found technically unacceptable, Heckler & Koch (H&K) and Smith & Wesson, filed bid protests with the GAO. GAO denied H&K's protest on its merits, and dismissed S&W's when it chose to pursue litigation. S&W lost its case in both the Federal District Court and the First Circuit Court of Appeals.

MANUFACTURERS SUBMITTING PISTOLS FOR 1984 COMPETITION—Continued

Manufacturer	Model	Comments
Smith & Wesson (S&W), U.S.A	459M	Terminated by Army on September 18, 1984, for failing service life and firing pin energy requirements.
Schweizerische Industrie Gesellschaft, Switzerland [1]	P226	Technically acceptable finalist.
Armi Beretta, SpA., Italy	92SB–F	Technically acceptable finalist and winner.

[1] This company is represented in the United States by SACO Defense Systems Division of the Maremont Corporation, Maine. SACO is a litigant contesting the Army's selection of Beretta.


Steyr Selbstladepistole
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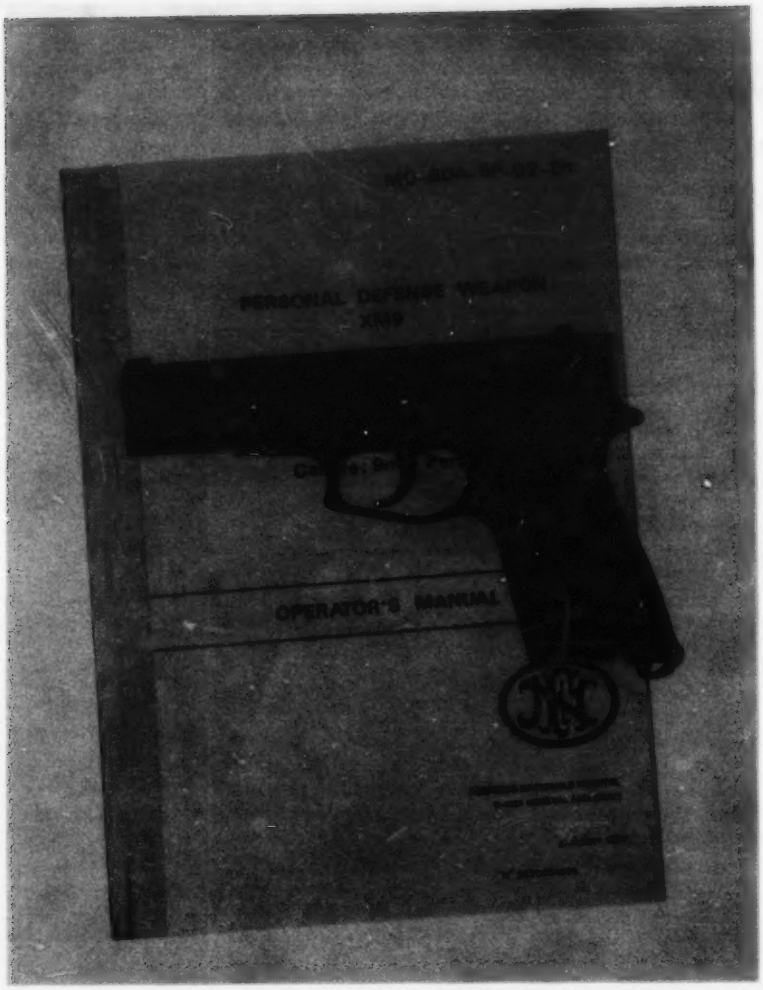
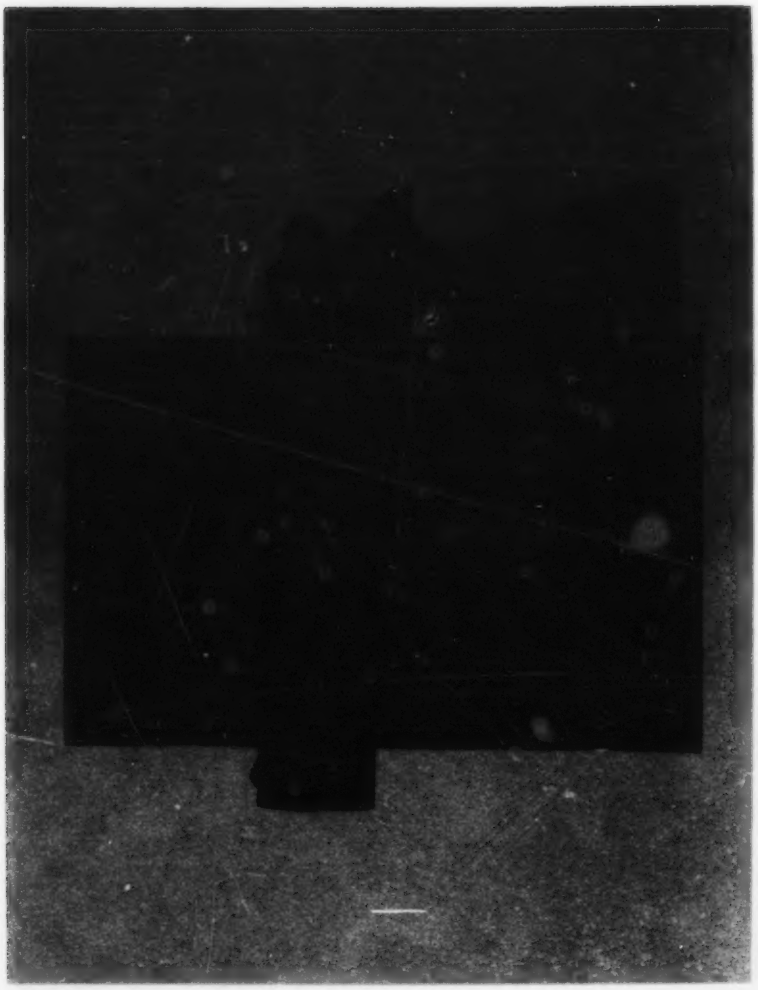
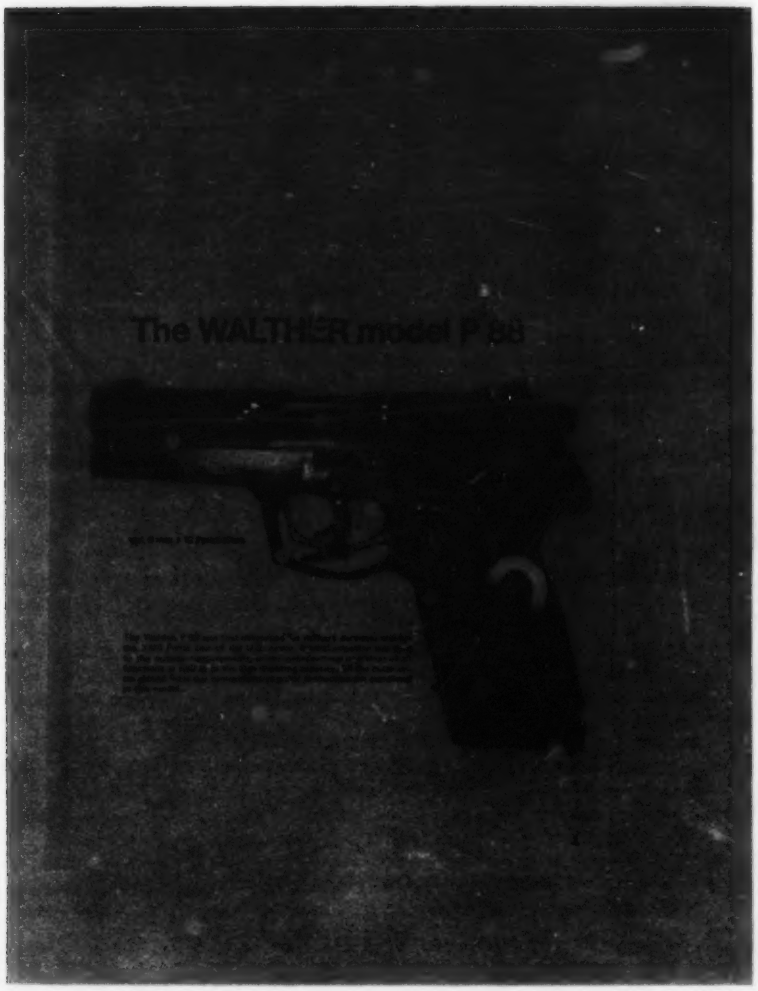
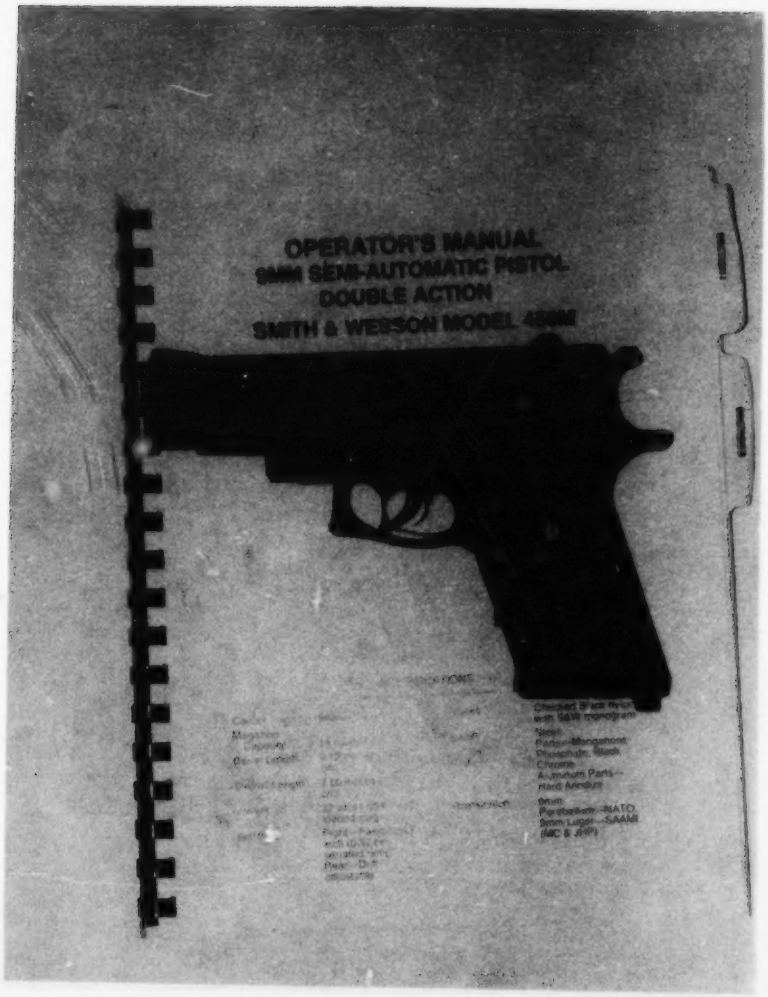
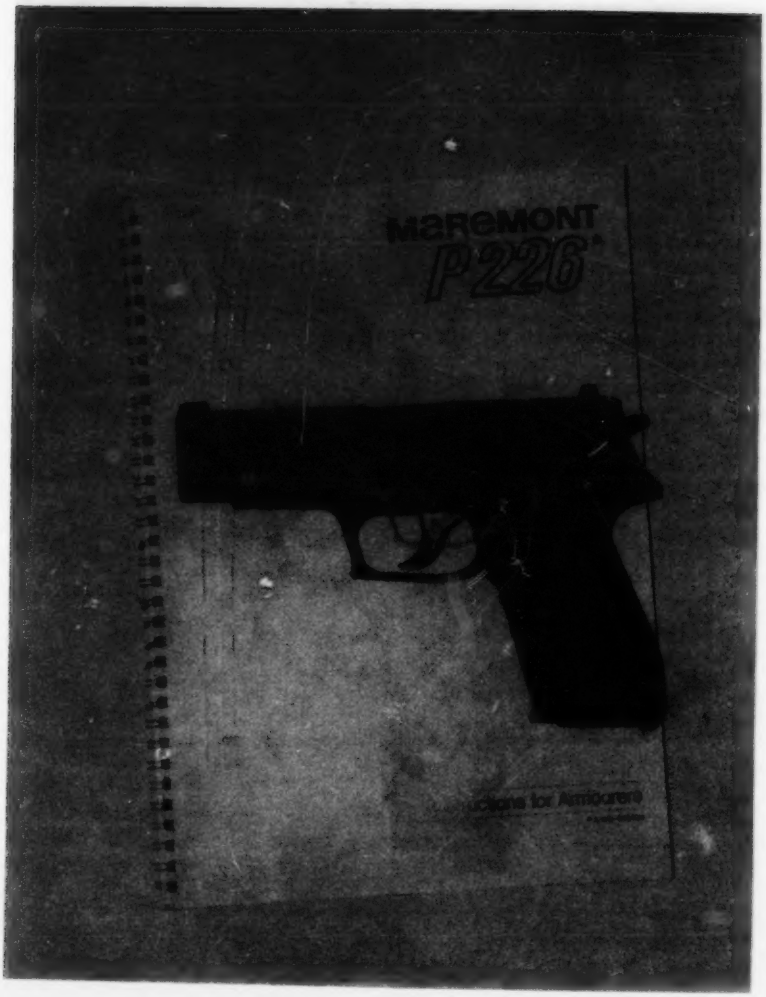

PERSONAL DEFENSE WEAPON
OPERATOR'S MANUAL




The WALTHER model P 88


OPERATOR'S MANUAL
9MM SEMI-AUTOMATIC PISTOL
DOUBLE ACTION
SMITH & WESSON MODEL 459M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The final phase of the 1984 competition involved the evaluation of the price proposals of the two finalists—Maremont Corporation and Beretta. Both submitted best and final proposals on October 9, 1984, and the evaluations were completed sometime prior to November 22, 1984. Maremont was the apparent winner with a low evaluated price of almost $75 million for the five-year package of pistols, magazines, and spare parts, about $9 million lower than Beretta's price.

However, a contract was not awarded to Maremont because Army officials decided that an additional 10,350 pistols and associated magazines and spare parts were needed. It is unclear why the Army felt it necessary to change its requirements at the last minute, particularly after best and finals. While the change was relatively small (approximately a three percent increase in the total order), it did necessitate a second round of best and final offers to be submitted by December 11, 1984, from the two finalists. In this second submission, Beretta dropped its price by about 18 percent, while Maremont's price remained the same. Although Maremont's unit price for its pistol was still less than Beretta's ($176.33 compared to $178.50), the total evaluated price for its magazines and spare parts was about $3 million higher. As a result, Beretta was awarded the contract. The following table compares prices submitted during both rounds of best and final offers.

COMPARISON OF FINALISTS' PRICES FIRST AND SECOND BEST AND FINAL OFFERS

Item	Units	Beretta		Maremont	
		Unit price	Total (millions)	Unite price	Total (millions)
First best and final offers, Oct. 9, 1984:					
Pistols	305,580	$217.84	$66.567	$176.33	$53.883
Magazines	1,222,320	9.30	11.368	11.95	14.607
Spare parts	30,558	209.59	6.405	221.79	6.777
Total			$84.340		$75.267
Apparent winner					$75.267
Second best and final offers, Dec. 11, 1984:					
Pistols	315,930	$178.50	$56.393	$176.33	$55.708
Magazines	1,263,720	9.30	11.753	11.95	15.101
Spare parts	31,595	209.42	6.616	221.79	7.007
Total			$74.762		$77.816
Winner			$74.762		

The Beretta contract

Beretta Corporation was selected as the winner of the 9-mm procurement competition and was awarded the contract on April 10, 1985. The multi-year contract was for 315,930 pistols at a total cost of about $75 million over five program years. The Army is currently in the second year of the contract and has already ordered 114,030 pistols. In April 1986, the contract quantity was increased by 4,100 for a total of 320,030 pistols. The total value of the pistols currently ordered, plus spares and magazines, is about $31.2 million.

As of May 30, 1986, about 7,700 pistols have actually been delivered under the contract, which is 8,800 pistols less than what the original contract schedule stipulated. Apparently, in early 1986, the Army renegotiated the delivery schedule to accommodate problems Beretta was having in meeting the terms of the original contract. The following chart compares the original schedule to the renegotiated schedule, showing that the procurement is to be back on schedule in January 1987.

DELIVERY INFORMATION

Month	Original contract	Cumulative	Renegotiated contract	Cumulative	Cumulative difference
1985:					
November	500	500			500
December	500	1,400			1,400
1986:					
January	1,800	3,200			3,200
February	2,500	5,700	550	550	5,150
March	3,500	9,200	1,200	1,750	7,450
April	3,500	12,700	2,700	4,450	8,250
May	3,800	16,500	3,250	7,700	8,800
June	5,000	21,500	4,000	11,700	9,800
July	5,500	27,000	4,200	15,900	11,100
August	5,500	32,500	4,500	20,400	12,100
September	6,000	38,500	6,000	26,400	12,100
October	6,000	44,500	6,000	32,400	12,100
November	6,000	50,500	6,700	39,100	11,400
December	6,000	56,500	10,270	49,370	7,130
1987:					
January	6,000	62,500	13,130	62,500	
February	6,000	68,500	6,000	68,500	
March	6,000	74,500	6,000	74,500	

One of the problems causing this slippage in schedule was Beretta's failure to pass first article acceptance testing, held originally in July 1985. In this test, the contractor provided samples of his product (20 pistols) for analyses by DOD to determine if they met the specifications of the contract. According to testimony provided by Smith & Wesson during the Subcommittee's hearing, numerous deficiencies were identified during first article testing including:

Nonconformance of numerous parts to Beretta's own drawings and specifications,

Failure of a number of guns to meet firing pin energy requirements, and

Failure to meet accuracy test requirements.

The Army finally passed Beretta after a second round of first article testing held in January 1986. Smith & Wesson claims that in order for Beretta to pass, the Army relaxed several key requirements. Mr. Hass of Smith & Wesson said his information indicated that approximately 133 waivers to the original contract had been granted to Beretta and that:

> The result is now that the gun being delivered to the Army is becoming less like the gun the Army chose every day.[6]

It is difficult to tell precisely how much the Army has allowed Beretta to deviate from its original bid. However, the relaxation of requirements, such as extending the delivery schedule, raises legitimate concerns of favoritism being shown to Beretta by the U.S. Army. Unfortunately, a familiar pattern appears to be developing where the agency is adjusting its requirements to accommodate shortfalls. If all competitors had had the chance to bid these relaxed requirements, the outcome may have been entirely different.

B. The 9-mm Handgun Procurement—A Flawed Program

Initiated to replace DOD's current inventory of Colt .45 and various models of .38 caliber revolvers, the established goal of the 9-mm program was to purchase a standard, "off-the-shelf," commercially available pistol. In attempting to accomplish this goal, it took DOD seven years and two false starts before finally awarding a contract to Beretta Corporation. In that process, the Army managed to conduct a procurement for a relatively simple and inexpensive weapon where most of the world's leading arms manufacturers were eliminated or withdrew from the competition. As pointed out by the GAO witness during the Subcommittee's hearings, "the 9-mm program was not a shining example of how to run an effective procurement and certainly not the way to buy an 'off-the-shelf' item." In fact, the general view of all those who testified, including the Army witness, was that virtually every phase of the procurement had serious problems and could serve as a model of how not to conduct an acquisition.

Under Secretary of the Army Ambrose, however, asserted that no company was treated unfairly. In his view, even though the procurement was flawed, it should not be recompeted because "* * * enough water is over this dam." Apparently, Mr. Ambrose believes that the 9-mm procurement has already consumed more than enough time and money. As the Congress has indicated in the Competition in Contracting Act (P.L. 98-369), however, extra expense should not be a factor when considering whether a substantially flawed procurement should be cancelled and recompeted in order to protect the integrity of the process. The facts presented during the hearing distinctly show that the Army did not conduct a full and open competition, and that at least one company, Smith & Wesson, was unfairly denied an opportunity to compete.

Smith & Wesson unfairly eliminated

Army officials eliminated S&W on the basis that its pistol failed to meet two of the fifty or so mandatory test requirements—24 inch ounces of firing pin energy and an expected service life of at least 5000 rounds. The evidence shows that the Army evaluations of these tests were seriously flawed. Further, while Smith & Wesson was required to meet these stringent criteria, its competi-

[6] Mr. Robert Haas, Senior Vice President of Marketing, Smith & Wesson, testified before the Subcommittee on June 5, 1986.

tors, including Beretta, benefitted from the Army's relaxation of certain other criteria.

Firing pin energy

The Army designed the firing pin energy requirement to ensure that candidate pistols could reliably fire any 9-mm cartridge having a primer hardness manufactured to NATO specifications. Those specifications stipulate that when a steel ball weighing 55 grams (about 1.94 ounces) is dropped from a height of 305 mm (about 12 inches), all primers shall fire. During hearings before the Subcommittee, Dr. Edward Ezell gave his view of the validity of this particular test. He stated:

> The test criteria called for the candidate pistols to leave an indent of a specified minimum depth on a copper cylinder replicating the energy needed to detonate the hardest foreign primer likely to be encountered. Since most of the ammunition an American GI would likely use in combat would be easier to detonate than the "worst case" replicated by the "test by analogy," a reasonable man would question if failure to pass this test was sufficient reason to reject any pistol.

The validity of the requirement aside, GAO found that in establishing the 24 inch ounces of firing pin energy specification, the Army had made a mistake in converting the NATO metric standard into United States units of measurement, thus overstating the needed energy. In other words, a more precise conversion would have resulted in a needed energy of 23.293427 inch ounces, rather than the 24 inch ounces used during the tests. As a result, Smith & Wesson was failed on this test for missing the required measurement by one-ten-thousandth of an inch. Its test pistols would have passed the more precisely converted firing pin energy requirements as explained in the following description of the test.

The firing pin energy test involved placing copper cylinders in a special adapter simulating a bullet. This device was in turn placed in a gun and the trigger pulled, leaving an indent caused by the weapon's firing pin in the piece of copper. A total of 70 such cylinders were indented in this manner—seven pistols fired five times each, in both single and double action modes (7 pistols $\times$ 5 firings $\times$ 2 modes = 70 indents). The evaluation criteria required that five of the seven pistols had to indent the cylinders an average of at least .0115 inch in order to pass the test. The .0115 inch measurement was established prior to testing as that needed to demonstrate firing pin energy of 24 inch ounces. However, if the Army had used the more precisely calculated firing pin energy of 23.293427 inch ounces, the required indent would have been .0113 inch.

Six of seven S&W pistols passed in single action mode, but only four of seven passed in the double action mode. However, of the three pistols that failed in double action mode (C2, C3, and C7), two failed by only one-ten-thousandth of an inch. As shown in the following chart, had the precise metric to U.S. conversion been used to establish the required energy, S&W would have passed, since only one of its pistols (C7) failed to meet the corrected criteria.

RESULTS OF SMITH & WESSON'S FIRING PIN ENERGY TEST USING CORRECTED CRITERIA [1]

Pistol	Results	Single action average indent	Double action average indent
C1	Pass	.0121	.0117
C2	Pass	.0116	[2].0114
C3	Pass	.0122	[2].0114
C4	Pass	.0118	.0117
C5	Pass	.0125	.0117
C6	Pass	.0117	.0120
C7	Fail	[3].0111	[3].0111

[1] Army requirement was that 5 of 7 pistols must pass.
[2] Pistols C2 and C3 failed using the incorrect Army criteria of .0115.
[3] Pistol C7 would have failed under either criteria.

Again, the purpose of the firing pin energy test was to ensure that candidate pistols could fire any 9-mm cartridge manufactured to NATO specifications. S&W clearly demonstrated this capability throughout the tests. Dr. Ezell highlighted this during the hearings when he said, "* * * a reasonable man would have noted that none of the Smith & Wesson pistols failed to fire the basic ammunition used in the other phases of the tests." In fact, the Army's test results show that S&W had no misfires as a result of firing pin energy in 33,000 rounds of endurance testing.

Service life

The Army also concluded that Smith & Wesson had failed to meet the criteria for endurance testing, using this as another reason for eliminating the company from the competition. The request for test samples called for "an expected service life of at least 5,000 rounds." The word "expected" is defined in dictionary terms as average and is used in the same way as the phrase "life expectancy". The average service life of the three Smith & Wesson pistols tested was at least 6,000 rounds. However, the company was eliminated because the Army believed one of the three endurance tested weapons did not exhibit a minimum service life of 5,000 rounds.

This decision was based on the fact that a visible frame crack was detected on one of the three S&W pistols tested for endurance. The crack was discovered during a scheduled inspection of the weapon that occurred after 5,000 rounds had been fired. The Army concluded that the crack must have occurred sometime between 4,500 and 5,000 rounds, thus before the minimum requirement had been met. At no time, however, did that crack impair the operation of the weapon, which fired reliably throughout the testing.

During the Subcommittee's hearings, Army Under Secretary Ambrose made the following statement regarding Smith & Wesson's cracked pistols:

> Well, we're not about to issue guns in that condition to anybody, Mr. Chairman. It did not affect the firing of the rounds up to the point, so far as I know at which the test was stopped * * * but we would not continue to leave that in issue, nor would we continue to fire it, even though it might conceivably be safe to fire.

In the Committee's view, the Under Secretary's comments are misleading and give an unfair characterization of the quality of Smith

& Wesson's product. In this regard, one of the finalists in the competition, Maremont Corporation, had two of its three pistols crack during endurance testing as well. Unlike Smith & Wesson, it was not disqualified from the competition.

In statements before the District Court, the Army argued that Smith & Wesson's test results indicate that its pistols had only a 52 percent probability of reaching an average 5,000-round service life. It asserted that such a low probability compared to Beretta's 88 percent was unacceptable and justification for using a minimum rather than an average criterion.

Using this rationale, the Army could have allowed competitors with much lower probabilities to continue in the competition. As shown in the following chart, a company whose three weapons all failed at 5,001 rounds, would have remained in the competition by meeting the minimum requirement although its probability of having a 5,000-service life was less than 10 percent.

ENDURANCE TEST

Army criteria (Pass)	Smith & Wesson (Fail)	Beretta (Pass)	Hypothetical (Pass)
5,000 Minimum	7,000	7,000	5,001
	4,500	7,000	5,001
	6,500	7,000	5,001
Total	18,000	21,000	15,003
Average	6,000	7,000	5,001
Average service life (confidence factor) (percent)	52	88	<10

One must question why the Army chose to follow such a stringent interpretation of the service life requirement. Dr. Ezell raised this issue in his testimony when he said:

> I, for one, am perplexed by this exact application of minimum expected service life criteria. Crucial questions I think remain. What is the significance, for example, of a life of 5,000 shots? How was that figure derived? What relationship does 5,000 shots have to do with, for example, previous pistols such as the M1911 pistol or the revolvers currently used by the military? How did the U.S. Armed Services come to the conclusion that a pistol should have led a minimum life of 5,000 shots?
>
> There is no evidence, as far as I've been able to determine, to suggest that the United States Army or any of the other services have kept life cycle data on previous handguns so they could say with any reasonable certainty how many times the average Model 1911 pistol or average revolver has been fired or can be fired before cracks appear that warrant a pending unserviceability. The 5,000 round figure appears to have been picked, so to speak, out of thin air by the planners of the test because it seemed to be a reasonably good guideline.

While Smith & Wesson was eliminated from the competition because of the Army's exact interpretation of two test criteria, other companies were allowed to remain because of the relaxation or more lenient interpretations of certain other criteria. In one case in particular, the accuracy tests, only S&W achieved 100 percent compliance with the stated requirement. However, those requirements were relaxed so that Beretta and the other companies could be considered acceptable as well.

Like the service life test, the accuracy test criteria initially required that all pistols tested must meet the requirement for that manufacturer to pass. Also, since the requirement was mandatory, failure to pass meant the candidate would be eliminated from the competition. Five of each competitor's pistols were tested for accuracy. Only one manufacturer, S&W, had all five guns individually pass the test. The requirement was relaxed, however, to allow averaging of the performance of all weapons and to change it from mandatory to negotiable at the option of the government.

A similar situation occurred concerning the adverse conditions test. This test is based on the fact that American soldiers could be tasked to fight in many different climates and environments, which could expose their weapons to conditions such as mud, salt water, sand and dust. Although passing these tests was mandatory, evaluators were instructed to use professional judgment and reason in arriving at conclusions. Such judgment was exercised in concluding that Maremont Corporation's weapon had passed one of these tests—the mud test.

The criteria established for the mud test called for candidate weapons to perform comparably to the Colt .45 control weapon, which had no malfunctions in either the wet or dry phase of the test. This performance was not equalled by any other weapon. Maremont's performance in dry mud, however, was 17 percent less than its nearest competitor. In other words, Maremont was not only not equal to the .45, but also not equal to the other weapons tested.

In using "professional judgment and reason", however, the Army concluded that the company met the requirement because it had passed the wet mud portion of the test, and because the dry mud requirement was probably unrealistic anyway when compared to potential field experience. Army evaluators also indicated that to exclude Maremont would have resulted in the elimination of what they considered an otherwise outstanding candidate, and would have left only one candidate in the competition.

Given the manner in which the Army conducted its testing of each of the competitor's weapons, it is clear that when it was convenient to, in effect, look the other way to keep Maremont or Beretta in the competition, they did so. On the other hand, when the Army decided to eliminate a competitor, it simply started applying stringent testing criteria.

IV. CONCLUSION

DOD's efforts to replace the Colt .45 with a new standard handgun was flawed from the beginning. The initial testing in 1978 consisted merely of some Air Force officials conducting informal tests

at a firing range which concluded that Beretta was by far the superior weapon. Later, a multi-service small arms task force used the results of this test to recommend that a Beretta pistol be adopted as the standard for all the military services. During that same timeframe, the Italian government was pressuring the Office of the Secretary of Defense to award a sole-source contract to Beretta. The task force recommendation was ultimately rejected after DOD itself came to the conclusion that the Air Force tests were defective and did not support the conclusion that the Beretta "was by a large margin" the best weapon tested.

The second attempt to buy a new standard handgun occurred in 1981 when the Army initiated a competitive procurement. This effort ended in a deadlock when all the companies that bid failed to meet the stringent joint services requirements. Although the Smith & Wesson pistol was rated number one in terms of price and performance at that time, the Army decided to cancel the procurement, revise the requirements, and try once again.

In the last go around, the Army used a new technique called "request for test samples" in an apparent attempt to avoid the problems that had been encountered in the earlier tries. Under this approach, each of the competitors were required to provide weapons for testing, but were not allowed to participate in or otherwise witness the proceedings. Further, the test results were kept confidential and were not given to the individual companies. It is clear that these testing procedures, afforded the Army considerable flexibility in deciding which companies would remain in the competition. This whole process apparently was designed to give the appearance of precise scientific testing when, in fact, the selection was, for the most part, based on subjective evaluation using questionable and in some cases arbitrary criteria. Intended or not, the result of all this is that the Army ended up evaluating bids from two firms offering foreign made pistols after all the domestic manufacturers were either eliminated or withdrew from the competition. Since at least one of these firms, Smith & Wesson, was unfairly denied the opportunity to compete, it is essential that the competition be reopened to all technically qualified companies.

Finally, with regard to the question whether the current contract was "wired" by the Army for the Beretta Corporation, the Committee did not find any concrete evidence that this occurred. It is clear from the evidence presented that there has been a long standing preference within elements of DOD for this company's handgun dating back to the late 1970's. It is, therefore, understandable why competitors have been concerned about the manner in which the program has been managed. The secrecy which the procurement has been cloaked in has fostered vendors' suspicion that they were not given a fair chance to compete for the requirement. The Smith & Wesson company had particularly good reason to suspect this may be the case. In 1982, its weapon was rated superior by the Army among all the weapons tested. Two years later, the Army, just four working days prior to submission of price proposals, declared Smith & Wesson weapons to be technically unacceptable. Even if the Army did not "wire" the procurement for Beretta, it seems to have gone out of its way to give the appearance it had.

V. FINDINGS

1. The appearance of bias and favoritism towards Beretta Corporation by DOD undermined industry confidence in this procurement.
2. The Army's use of rigid military specifications was inappropriate for an "off-the-shelf" procurement.
3. The testing criteria was not based on well defined operational requirements or the actual needs of the military services.
4. The secrecy with which the Army conducted its testing and retained the results thereof has contributed to the air of distrust about its motives.
5. The award to Beretta was improper in that Smith & Wesson was unfairly eliminated from the competition.

VI. RECOMMENDATIONS

1. The Committee recommends that the Secretary of the Army direct that the contract with Beretta Corporation be cancelled after the fulfillment of the current order.
2. The Secretary should ensure that no further substantive modifications or waivers to the current contract be made.
3. The Secretary should direct a recompetition among technically acceptable candidates for the remaining number of pistols needed by the military services beyond those currently on order from Beretta.
4. If the Secretary fails to implement these recommendations, the Committee recommends that the House Appropriations Committee eliminate further funding for this program.

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